

**TRANSLATION****PATENT COOPERATION TREATY****PCT****INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>25308N1PCTgz</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/EP2005/055176</b>	International filing date ( <i>day/month/year</i> ) <b>12.10.2005</b>	Priority date ( <i>day/month/year</i> ) <b>15.10.2004</b>
International Patent Classification (IPC) or national classification and IPC <b>H01R4/30, H01R11/26</b>		
Applicant <b>GUSTAV KLAUKE GMBH</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2. This REPORT consists of a total of <u>7</u> sheets, including this cover sheet.	
3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> ( <i>sent to the applicant and to the International Bureau</i> ) a total of <u>13</u> sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> ( <i>sent to the International Bureau only</i> ) a total of _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application	

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/055176

## Box No. I Basis of the report

1. With regard to the
- language**
- , this report is based on:

- ☒ the international application in the language in which it was filed
- ☐ the translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rule 55.2(a) and/or 55.3(a))

2. With regard to the
- elements**
- of the international application, this report is based on (
- replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*
- ):

- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-17 as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 1-30 received by this Authority on 27.04.2006 with letter of 26.04.2006
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- sheets 1/11, 3/11, 5/11, 6/11 as originally filed/furnished
- sheets\* 2/11, 4/11, 7/11-11/11 received by this Authority on 27.04.2006 with letter of 26.04.2006
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

- 3.
- ☐
- The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

- 4.
- ☐
- This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1.	Statement		
	Novelty (N)	Claims <u>1-30</u>	YES
		Claims _____	NO
	Inventive step (IS)	Claims <u>1-30</u>	YES
		Claims _____	NO
	Industrial applicability (IA)	Claims <u>1-30</u>	YES
		Claims _____	NO
2.	Citations and explanations (Rule 70.7)		
	<p>Reference is made to the following documents:</p> <p>D1: DE 94 12 215 U1 (LAMSON + SESSIONS GMBH) 22 September 1994 (1994-09-22) cited in the application</p> <p>D2: FR-A-2 758 661 (PRONER COMATEL) 24 July 1998 (1998-07-24)</p> <p>INDEPENDENT CLAIM 1:</p> <p>Document D1 is considered the prior art closest to the subject matter of claim 1 and discloses:</p> <p>cable lug with a tubular receiving section for the cable, a moulded on flat piece connecting section with a hole, and a nut which is captively mounted on the flat piece connecting section and is preferably rotatably mounted, the nut not penetrating the flat piece connecting section but being mounted using a mounting material section of the flat piece connecting section which engages in an undercut formed in the nut, the mounting material section being accommodated in the</p>		

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	<p>undercut with axial clearance.</p> <p>The subject matter of claim 1 thus differs in that the nut is mounted on a shaped mounting material section of the flat piece connecting section.</p> <p>The subject matter of claim 1 is thus novel (PCT Article 33(2)).</p> <p>The present invention can therefore be considered to address the problem of simplifying the compression connection between a nut and a cable lug.</p> <p>For the following reasons, the solution to that problem as proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)):</p> <p>according to the subject matter of D1, the nut must first be inserted into the flat piece connecting section, the nut at that time still projecting from the bottom of the flat piece connecting section. The nut must then be shaped so that it is captively mounted on the flat piece connecting section.</p> <p>INDEPENDENT CLAIM 2</p> <p>Document D2 is considered the closest prior art and discloses a cable lug with a tubular receiving section for the cable, a moulded on flat piece</p>

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	<p>connecting section with a hole, and a functional piece which is captively mounted on the flat piece connecting section and is preferably rotatably mounted, the functional piece being mounted using a mounting material section which engages in an undercut formed in the functional piece, said mounting material section being rooted in a section which is gradually depressed towards the uninfluenced surrounding section of the flat piece connecting section, the undercut having an axial extension which is the same as or smaller than the axial extension of the uninfluenced flat piece connecting section, the gradual depression being rotationally symmetrical.</p> <p>The subject matter of independent claim 2 differs therefrom in that the gradual depression has a conical section which opens up outwardly and vertically and has at least one conical face.</p> <p>The subject matter of claim 2 is thus novel (PCT Article 33(2)).</p> <p>The present invention can therefore be considered to address the problem of simplifying the compression connection between a nut and a cable lug.</p> <p>For the following reasons, the solution to that problem as proposed in claim 2 of the present application involves an inventive step (PCT Article 33(3)):</p>

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no indication of the solution in the prior art.

#### INDEPENDENT CLAIM 19

Document D2 is considered the closest prior art. The subject matter of independent claim 19 differs from the disclosure of document D2 in that the functional piece is not pressed into the unshaped flat piece connecting section.

The present invention can therefore be considered to address the problem of simplifying the compression connection between a nut and a cable lug.

For the following reasons, the solution to that problem as proposed in claim 19 of the present application involves an inventive step (PCT Article 33(3)):

no indication of the solution in the prior art.

#### INDEPENDENT CLAIM 20

Document D2 is considered the closest prior art and discloses (see figure 2) (the references between parentheses refer to D2): a nut (2) which can be inserted in a hole (4) in a flat piece connecting section of a cable lug, the nut having on one side, relative to its screwing-on or screwing-off direction, a radially open undercut

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	<p>(7) in the axial direction of the nut, with an upper and a lower limiting face, the undercut being rotationally symmetrical.</p> <p>The subject matter of independent claim 20 differs therefrom in that the upper limiting face is part of a rotationally symmetrical graduated face formed on the nut.</p> <p>The present invention can therefore be considered to address the problem of simplifying mounting of the nut on the flat piece.</p> <p>For the following reasons, the solution to that problem as proposed in claim 20 of the present application involves an inventive step (PCT Article 33(3)):</p> <p>a nut according to claim 20 can be captively connected to the mounting material section but remain rotatable by pressing from above into the mounting material section.</p> <p>Claims 3-18 and 21-30 are dependent on claim 1, claim 2 or claim 20 and therefore likewise meet the PCT requirements for novelty and inventive step.</p>